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Docket Number (Optional)  
MP0078

## PRE-APPEAL BRIEF REQUEST FOR REVIEW

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)]

On August 10, 2006

Signature

Typed or printed name Michael D. Wiggins

Application Number  
10/054,595Filed  
01/22/2002First Named Inventor  
Donald PannellArt Unit  
2616Examiner  
Warner Wong

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal.

## Notice of Appeal

The review is requested for the reason(s) stated on the attached sheet(s).

Note: No more than five (5) pages may be provided.

## Pre-Appeal Brief Request For Review and Petition for Extension of Time (5 pgs)

I am the

 applicant/inventor  
Signature

Michael D. Wiggins

Typed or printed name

assignee of record of the entire interest.  
See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is  
enclosed. (Form PTO/SB/96)

248-641-1600

Telephone number

attorney or agent of record.  
Registration number 34,754.

August 10, 2006

Date

attorney or agent acting under 37 CFR 1.34.  
Registration number if acting under 37 CFR 1.34 \_\_\_\_\_

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below\*.

\*Total of \_\_\_\_\_ forms are submitted.



**PATENT**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Application No.: 10/054,595

Filing Date: 01/22/2002

Applicant: Donald Pannell

Group Art Unit: 2616

Examiner: Warner Wong

Title: QUALITY OF SERVICE HALF-DUPLEX MEDIA  
ACCESS CONTROLLER

Attorney Docket: MP0078

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Mail Stop AF  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

**PRE-APPEAL BRIEF REQUEST FOR REVIEW**

Applicants request Pre-Appeal Brief Review and contend that there is no suggestion or motivation to modify the teachings of Lipcon (U.S. Pat. No. 4,380,088) with the teachings of Kim (U.S. Pat. Pub. No. 2002/0085582) and/or Saxena (U.S. Pat. Pub. No. 2003/0103517) and that the combination of the above references fails to teach or suggest the elements of the presently pending claims.

**STATUS OF CLAIMS**

Claims 8-11 and 21-24 are allowed. Claims 34-37, 47-50, 55, 63-66, 71, and 79-82 are objected to. Claims 1-2, 6, 12, 14-15, 19, 25, 27-28, 32, 38, 40-41, 45, and 51 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Lipcon (U.S. Pat. No. 4,380,088) in view of Kim (U.S. Pub. No. 2002/0085582).

The remaining claims are rejected under 35 U.S.C. § 103(a) as being unpatentable over Lipcon in view of Kim, and further in view of at least one of Krishna (U.S. Pat. No. 5,822,538), Hazu (U.S. Pat. No. 5,455,841), and Saxena (U.S. Pub. No. 2003/0103517).

### **SUMMARY OF CLAIMED SUBJECT MATTER**

Independent claim 1 recites a method for communicating on a half-duplex channel. The method terminates transmission of a first frame using a first transmitter when a collision is detected during transmission and transmits a second frame using the first transmitter before transmitting the second frame when the second frame has a higher class of service than the first frame. Independent claims 14, 27, 40, 53, and 69 recite similar subject matter.

### **ARGUMENT**

Applicant respectfully submits that the combination of Lipcon and Kim is improper and that the combination, even if proper, fails to teach or suggest transmitting a first frame using a first transmitter, terminating transmission of the first frame when a collision is detected, and transmitting a second frame using the first transmitter before retransmitting the second frame.

Initially, Applicant respectfully submits that the combination of Lipcon and Kim is improper because Kim teaches away from collision detection. Applicant respectfully notes that Kim is directed to carrier-sense multiple access with collision avoidance (CSMA/CA). (Paragraph [0004]). A CSMA/CA system is directed to using back-off timers to modify a transmission sequence when the medium is detected as busy as opposed to modifying a transmission sequence after a collision (see Response dated February 8, 2006).

In contrast, Lipcon is directed to a “tester for the collision detector of a transceiver for a multiple access data communications network.” (See Abstract of Lipcon). More specifically, Lipcon is directed to a tester for a transceiver in a carrier-sense multiple access with collision detection (CSMA/CD) system. (Column 2, Lines 24-25). In CSMA/CD systems, only the frames involved in a

collision are assigned back-off times. After the back-off times, only the frames involved in the collision are transmitted again. As best understood by Applicant, Kim is directed to a collision avoidance method and therefore teaches away from collision detection as Lipcon discloses.

In view of the foregoing, Applicant respectfully submits that the Examiner has failed to support his alleged motivation to combine these references and instead relies on impermissible hindsight. Kim is directed to a collision avoidance method and appears to be completely absent of any teaching or suggestion of a collision detection method. Lipcon is directed to a tester for a collision detector in a collision detection network. One skilled in the art presented with Kim, which is directed to collision avoidance, would have no motivation to look to the teachings of Lipcon, which is directed to a tester for a collision detector. Applicant respectfully submits that the rejection is founded upon "knowledge gleaned only from applicant's disclosure" (MPEP § 2145) and thus entails impermissible hindsight and is improper.

Further, the alleged combination fails to disclose terminating transmission of the first frame when a collision is detected, and transmitting a second frame using the first transmitter before retransmitting the second frame. Applicant's invention is directed to modifying a transmission sequence after a collision. More specifically, Applicant's invention is directed to modifying a transmission sequence of first and second frames from a first transmitter. A first frame is transmitted using the first transmitter. The transmission of the first frame is terminated when a collision is detected. A second frame is transmitted before retransmitting the first frame (still using the first transmitter).

With respect to Kim, Applicant again notes that a CSMA/CA network such as Kim discloses is directed to using back-off timers to modify a transmission sequence when the medium is detected as busy. For example, paragraph [0005] of Kim states "[t]he exponential back-off processes are conducted whenever the medium, to which a station tries to transmit a MAC Protocol Data Unit (MPDU), is detected as busy." Kim appears to be absent of any teaching or suggestion of modifying a transmission sequence after a collision. More specifically, Kim

appears to be absent of transmitting a second frame before a first frame, using a first transmitter, when the first frame is involved in a collision. As such, Kim does not disclose terminating transmission of a first frame (using a first transmitter) when a collision is detected during the transmission, and transmitting a second frame (using the first transmitter) before retransmitting the first frame as claim 1 requires.

With respect to Lipcon, in conventional CSMA/CD systems, the first frame, as well as the other frames involved in the collision that other transmitters are attempting to transmit, are assigned a back-off time and then transmitted again. In other words, in CSMA/CD systems, only the frames involved in the collision are transmitted again after the back-off times. Applicant's invention is not limited to frames involved in the collision, as is the case with CSMA/CD systems such as Lipcon discloses. Instead, Applicant's invention is directed to transmitting a second frame with the first transmitter (i.e. a second frame that was not involved with the collision) before transmitting the first frame.

For example, Column 1, Lines 50-53 of Lipcon state that "each transceiver sends the collision signal back to its host device and in response both hosts stop transmitting. Both then try retransmission after the channel is clear." Further, "to avoid repeated collisions, each then waits a pseudorandom interval and tries again." (Column 1, Lines 60-62). In other words, Lipcon discloses retransmission after a collision but appears to be absent of any teaching or suggestion of transmitting a second frame before retransmission of a first frame (that was initially involved in the collision) after a collision. As best understood by Applicant, Lipcon discloses attempting to retransmit the first frame.

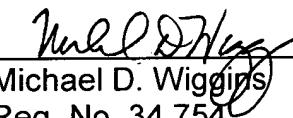
## CONCLUSION

Applicant respectfully submits that there is no suggestion or motivation to modify the CSMA/CA system of Kim with the teachings of Lipcon. Kim is directed to a collision avoidance system and Lipcon is directed to a collision detection system. In fact, Lipcon is more specifically directed to a tester for a collision detection system.

Even if such a combination is possible, the combination still fails to teach or suggest the limitations of Applicant's claim 1. Kim fails to show, teach, or suggest transmitting a second frame before retransmitting a first frame after a collision and instead discloses modifying a transmission sequence when a transmission medium is busy. Similarly, Lipcon fails to show, teach, or suggest this limitation and instead appears to disclose attempting to retransmit the first frame. Accordingly, Applicant respectfully submits that claim 1 and the remaining independent claims, as well as their corresponding dependent claims, should be allowable for at least the above reasons.

Respectfully submitted,

Dated: August 10, 2006

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